REMARKS

Claims 8 to 22 are currently pending.

Applicants respectfully request reconsideration of the present application in view of this Response.

In paragraph one (1) of the Final Office Action, claims 8 to 22 were finally rejected under 35 U.S.C. § 102(b) as anticipated by Ogasawara, U.S. Patent No. 5,170,106 (the Ogasawara reference).

As regards the anticipation rejections of the claims, to reject a claim under 35 U.S.C. § 102(b), the Office must demonstrate that each and every claim feature is identically described or contained in a single prior art reference. (See *Scripps Clinic & Research Foundation v. Genentech, Inc.*, 18 U.S.P.Q.2d 1001, 1010 (Fed. Cir. 1991)). As explained herein, it is respectfully submitted that the Office Action does not meet this standard, for example, as to all of the features of the claims. Still further, not only must each of the claim features be identically described, an anticipatory reference must also enable a person having ordinary skill in the art to practice the claimed subject matter. (See *Akzo, N.V. v. U.S.I.T.C.*, 1 U.S.P.Q.2d 1241, 1245 (Fed. Cir. 1986)).

As further regards the anticipation rejections, to the extent that the Office Action may be relying on the inherency doctrine, it is respectfully submitted that to rely on inherency, the Examiner must provide a "basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristics *necessarily* flows from the teachings of the applied art." (See M.P.E.P. § 2112; emphasis in original; and see *Ex parte Levy*, 17 U.S.P.Q.2d 1461, 1464 (Bd. Pat. App. & Int'f. 1990)). Thus, the M.P.E.P. and the case law make clear that simply because a certain result or characteristic may occur in the prior art does not establish the inherency of that result or characteristic.

Regarding the Ogasawara reference, it is respectfully re-submitted that this reference simply does not identically describe (or even suggest) each of the features of claim 8, which include the features of an electronic control unit for controlling the output stages using operating PWM control signals, a pulse width of the control signals being reducible as a function of a magnitude of a supply voltage and a specified setpoint such that the motor is protected against overloading, the control signals being determined by a

specified operating setpoint up to a nominal voltage of the supply voltage, in which *the pulse width of the control signals is reducible in linear or nonlinear proportion to an increasing supply voltage only upon exceeding the nominal voltage*.

It is submitted that the "analysis" of the Office Actions is incorrect for the following reasons. In the first Office Action, it is asserted that the CPU (14) shown in Figure 2 of Ogasawara is an "output stage" as in claim 8. (See Office Action of Nov. 13, 2003, page 3). It is further asserted that the nominal voltage:

> appears to be the Eb1 of Fig. 5; [f]rom Fig. 5, there is no curve showing the PWM control until the motor voltage of Eb1; above Eb1, the PWM is under controlled; thus, Eb1 is equivalent to the minimum point in the chopping wave.

(Office Action of Nov. 13, 2003, page 4)(emphasis added).

The above-quoted (and emphasized) statement contradicts another statement made in the Office Action that "a specified setpoint can be read onto: (1) the minimum point of the chopping wave generator circuit." Id. at page 3. It is clear from the wording of claim 8 (i.e., "the control signals being determined by a specified operating setpoint up to a nominal voltage of the supply voltage") that the setpoint and the nominal voltage ***are not the same parameter***. Thus, the Office Action cannot be correct or consistent when it attempts to equate both of these parameters with the minimum point in the chopping wave.

In addition, arguments of the Final Office Action are based on the assertion that "Ogasawara clearly teaches that, if the voltage is over Eb1, the applied voltage is pulse-width modulated so that the applied voltage will reduce and the overvoltage or overcurrent will not occur." (See Final Office Action, page 4, "Examiner's response"). However, this assertion is also incorrect at least because the pulse width of the signals applied to what the Office Actions refer to as an output stage (i.e., the CPU (14), the equivalence of which is not conceded) is not modulated so that the applied voltage will reduce at the point who the supply voltage is over Eb1. As may be discerned from a review of Figures 2 and 4 of Ogasawara, the "control signal" *that is applied to the CPU (14) is supplied from a gate (50),* which, in turn, receives input from a comparator (46) and a rotation sensor (12). While Ogasawara states that "a voltage difference between the

chopping wave and reference voltage comes out as a rectangular wave with corresponding width through the comparator" (see Ogasawara, col. 4, lines 61 to 64), *the output of the comparator is not supplied to the CPU.*

In fact, a crucial aspect of Ogasawara is that the shortened pulses output from the comparator are matched by the shortened pulses from the rotation sensor, which is discussed as follows:

> In the FIG. 4, it can be seen that, in accordance as the motor voltage (Eb) increases, *the number of pulses output from the rotation sensor (12) is increased in proportion therewith*, thus indicating the decrease in pulse generation period of the motor sensor (12) in a proportion to the increase of motor voltage (Eb).
>
> . . . .
>
> The gate circuit (50) . . . is so arranged *as to output a certain number of the above-recited rotation sensor's output pulses in a proportional relation with the above-defined voltage value being set by the comparator (46)(i.e., the width of the rectangular pulse being output from the comparator (46))*.
>
> . . . .
>
> With the above-described arrangement, when the motor (M) is applied a load and reduced its revolution number, the period of pulses generated from the rotation sensor (12) is rendered longer. In that case, the pulses of rotation sensor (12) are naturally reduced in number and responsive thereto, ***the number of pulses*** from the gate circuit (50) (i.e. the overload detection signal) ***is also reduced. If the pulses of the gate circuit (50) identified as the overload detection signal are reduced down below a set value, the CPU (14) determines the motor (M) to be in the state of overload and immediately stop the supply of voltage to the motor (M)***. The motor (M) is thus protected against an over-current which is produced in such overload state.

(Ogasawara, col. 5, lines 7 to 57)(emphasis added).

A careful reading of the above-quoted passages makes plain that the CPU (i.e., the output stage according to the Office Actions) *does not receive a pulse-width modified signal,* because this signal is intercepted by the gate (50). In contrast, the output stage receives a

count of short, spike-like pulses as shown in Fig. 4. In other words, in Ogasawara *it is irrelevant if the supply voltage exceeds a nominal voltage value so long as the increased output of rotation sensor is proportional.* It is only when they are not proportional -- when the output from the rotation sensor slows due to an applied load -- that the control signal to the output *stage changes, and this change is in terms of a pulse count*, as opposed to a pulse *width.* It is therefore respectfully submitted that Ogasawara does not identically disclose or describe (or even suggest) that the pulse *width of the control signals* (applied to the output stage) is reducible in linear or nonlinear proportion to an increasing supply voltage *upon exceeding the nominal voltage*, as in the claim.

For at least the reasons given above, it is submitted that Ogasawara does not anticipate the subject matter of claim 8, which is therefore allowable. Claims 9 to 22 depend from claim 8, and are therefore allowable for at least the same reasons given above with respect to claim 8.

Accordingly, claims 8 to 22 are allowable.

CONCLUSION

In view of all the above, it is believed that the objections and rejections have been obviated, and that claims 8 to 22 are allowable. It is therefore respectfully requested that the objections and rejections be reconsidered and withdrawn, and that the present application issue as early as possible.

Respectfully submitted,
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